



National Aeronautics and Space Administration  
Goddard Space Flight Center

Wallops Flight Facility, Wallops Island, Virginia

# Inside Wallops

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## NEW Teachers Attend Workshop at Goddard

Twenty-five teachers from Indiana, Maryland, New York, Virginia, Connecticut, Iowa, Massachusetts, Pennsylvania, Rhode Island, Kentucky, Ohio, Florida and West Virginia spent the first week of a two-week NASA Educator Workshop at Goddard Space Flight Center's Greenbelt campus. The math and science teachers for grades 5-12 were learning about the Center's work in remote sensing science and technology.

While at Wallops for the second week, July 10-14, the teachers learned about the Student Experiment Module (SEM) and SubSEM programs, received a tour of the sounding rocket manufacturing and testing facility and the Small Shuttle payload lab, and received instructions on rocketry basics, weather and scientific balloons. They also attended briefings and workshops on aircraft lasers and aerial photography.



PAO digital photo

*Doug Klumpe (left), West Lafayette, IN. and Ben Preddy, Media, PA. work on a multispec lesson using satellite imagery.*

The following Wallops employees assisted with the programs: Phil Eberspeaker, Policy and Business Relations Office; Debbie Fairbrother, Balloon Program Office; Magdi Said, Carrier Systems Branch; Brian Cunningham and Range Control Center Support Group, GHG; Bill Krabill and Geoff Bland, Observational Science Branch; Tom Northam, Science and Engineering Services; Doug Young, Aircraft Office; Berit Bland, SymTech; Tony Goodyear and Mike Savoy, Public Affairs Office.

"We hope that through this intense two-week program, the teachers increased their knowledge of the science and technology involved in performing remote sensing and apply this in their work with students," said Dr. Robert Gabrys, Education chief in the Public Affairs Office at GSFC.

"The program is structured to give the teachers an opportunity to share their teaching experiences and ideas and

practice a "hands on/minds on" instructional approach integrating science, mathematics and technology," said Gabrys.

The teachers worked cooperatively in groups and discussed the use of new knowledge and skills in their classrooms and worked with their colleagues to model teaching, learning, assessment, and professional development strategies called for in the science, mathematics and technology education standards.

The NEW program is sponsored and funded by NASA. The National Science Teachers Association (NSTA) serves as the educational partner to the program and provides administrative support.

The National Council of Teachers of Mathematics (NCTM) and the International Technology Education Association (ITEA) also provides educational guidance to the program.

## Zvezda Reaches Orbit, Space Station Docking Next

The International Space Station program successfully launched the Zvezda Module to orbit on July 12 at 12:56 a.m. EDT from the Baikonur Cosmodrome, Kazakhstan.

The module will serve as living quarters for the early Space Station crews. Zvezda will orbit the Earth for two weeks as flight controllers prepare for its rendezvous and docking with the International Space Station, which is scheduled for 8:44 p.m. EDT, July 25 or 0:44 GMT July 26. Once docked, Zvezda will become the third major component of the station.

### Statement by the Vice President

The successful launch of the Zvezda service module from Baikonur, Kazakhstan marks an important milestone in the development of the International Space Station. It represents the result of intense space cooperation between the United States and Russia as part of the 16 nation International Space Station consortium. It also represents the achievement of one of the earliest objectives of the U.S.-Russia Bi-National Commission's Space Committee. All Americans can take pride in this exciting accomplishment.

## Wallops Shorts.....

### Balloon Launch

A NASA scientific balloon was successfully launched July 7 from Palestine, Texas. The four million cubic foot balloon carried an upper atmosphere research experiment. Dr. Frank Murcray, University of Denver was the principal investigator. Total flight time was 6 hours, 25 minutes.



Astrotech photo.

*Astrotech's Terrier-Oriole*

### Sounding Rocket Launches

A commercial Terrier-Oriole suborbital rocket was successfully launched July 7 from Wallops Island. The vehicle was developed by Astrotech Space Operations. The demonstration flight flew to an altitude of approximately 229 miles (368 kilometers) altitude. The instrumented payload to gather vehicle performance and launch environmental data was not recovered.

A NASA Nike-Black Brant sounding rocket was successfully launched July 17 from Wallops Island. The payload was a plasma physics experiment for Dr. John Wygant, University of Minnesota.

### Fire Department Responses

July 6 to July 13  
Aircraft Stand-bys -- 53  
Aircraft Emergency Landing -- 1  
Fire Alarms -- 3  
Ambulance Calls -- 0  
Mutual Aid Assistance -- 1  
Vehicle fire in Atlantic

### Spaceflight Academy

The first week of Spaceflight Academy 2000 was held July 9-14 with 12 students attending. The Academy, held at Wallops, is sponsored by NASA Wallops Flight Facility, Virginia Space Flight Center and the Eastern Shore Regional Partnership. The Academy also is scheduled for July 23-28 and August 6-11.

**Library News**

Three CD Rom data bases have been added to the Library’s collection and are available for use in the Library:

- Pressure Strain and Force -- Complete 1200 page handbook
- Temperatures -- Complete 2200 page handbook and encyclopedia
- Data Acquisitions Systems -- Complete 1100 page Handbook

**Book Renewal**

Many people are still requesting renewals by replying to the overdue e-mail notices. On-line book renewal is available. To renew on-line, go to the Library’s homepage ([http:// library.gsfc.nasa.gov](http://library.gsfc.nasa.gov)) and click on Request. You will be asked to input your library card number and click on List Charged Items. Place a check mark next to the ones you would like renewed and hit enter. That is all there is to it.

**Notice to Interlibrary Loan Users**

Several people requesting Interlibrary Loans have gone on travel and taken the books with them. The books were not returned before they were due, which caused the Interlibrary Loan Technician problems with the Lending Libraries. These books are borrowed on good faith that they will either be renewed or returned on time. Late returns jeopardize our borrowing privileges with the Lending Libraries, and some of them may be the only source for a particular publication. Make sure that books are checked out for a period of time sufficient to cover your travel time or returned prior to going on travel.

**Illiad Request System**

For those of you who may need to obtain or borrow articles/papers, documents or books in the future, the registration form for the new Illiad Borrowing and Lending System must be completed before the request can be filled. Anyone needing instructions for this process should contact Sam Hall, x1065 or [dhall@library.gsfc.nasa.gov](mailto:dhall@library.gsfc.nasa.gov)

**Tropical Weather Web Sites**

NWS National Hurricane Center  
<http://www.nhc.noaa.gov>

National Oceanic and Atmospheric Administration  
<http://hurricanes.noaa.gov/>

FEMA and Lowes sponsored Hurricane Central page  
<http://www.storm99.com>

Dr. William Gray’s Seasonal Hurricane Forecasts  
<http://tropical.atmos.colostate.edu/forecasts/index.html>



**Fish Fry & Dance  
All-You-Can-Eat**



August 4, 2000  
6 p.m.  
Building F-3

Tickets: \$10 — ages 11 to adult  
\$ 5 — ages 10 and under

Dinner includes one soft drink, extra drinks are \$0.25 and hotdogs will be available.

Menu:	
Fried Fish	Corn-on-the-Cob
Green Beans	Hush Puppies
French Fries	Melons

Music by “Tittlemania”

Tickets are available from Rebecca Beach, x1559; Larry Duffy, x1539; Cheryl Johnson, x1607; Pam Milbourne, x2020; and Audrey Young, x1084.

**Riding out the storm  
How does a hurricane form?**

Hurricanes begin as clusters of showers and thunderstorms over tropical waters. Heat and moisture are the main source of energy for a hurricane. Developing hurricanes gather energy through contact with warm ocean waters. Water temperatures of 80 degrees or warmer are typically needed for storm development.

Wind patterns are critical for tropical storm formation. The pattern most conducive to tropical storm formation is when low-level winds, below 5,000 feet, are converging and upper-level winds, above 25,000 feet, are light and diverging. Upper-level winds that are too strong will greatly inhibit tropical storm development and often cause a hurricane or tropical storm to weaken.

**Who issues hurricane watches and warnings?**

Hurricane watches, warnings and advisories are officially issued by the National Weather Service’s National Hurricane Center in Coral Gables, Fla. Meteorologists at the NHC specialize in hurricane and tropical storm forecasting. They continually monitor atmospheric and ocean conditions, evaluate an array of atmospheric computer models and issue watches, warnings and advisories on tropical storms and hurricanes.

**Dealing with Difficult People  
in the Work Place**

July 20  
11:30 a.m.  
Building E-2

A video will be shown to raise awareness about how to interact with people and handle conflicts with people who may irritate, upset or exasperate you. The narrator of the video, Dr. Bill Bissell, will illustrate essential techniques for dealing with people who are somewhat difficult. These techniques are presented in a light, humorous fashion while still providing useful and helpful information. This program is sponsored by the Employee Assistance Program.

**Achieving Balance**

July 20, 2000  
12:30 to 1:30 p.m.  
Building E-2

Deborah Mathews, clinical social worker in Worcester County, MD, will facilitate a discussion on maintaining balance between our professional and personal lives. Mathews also is a faculty member at Salisbury State University and is currently pursuing her PhD from the University of Maryland. She has served as director of the Life Crisis Center in Salisbury and For All Seasons, Inc., in Easton, MD.

Wallops employees are invited to attend the forum and share their suggestions, concerns, and questions on how to effectively maintain balance in our lives. No training requests are required. This program is co-sponsored by the Women of Wallops Federal Women’s Program Advisory Committee and the Equal Opportunity Office.

**Wallops Blood Drive  
Blood Bank  
of the  
Eastern Shore**

July 25  
9 a.m. to 3 p.m.  
Bldg. F-3  
Call Linda Layton, x1561



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